UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/597,199	07/14/2006	Karsten Buse	20811/0204481-US0	7625
7278 DARBY & DA	7590 12/09/200 RBY P.C.	EXAMINER		
P.O. BOX 770	- •	HITESHEW, FELISA CARLA		
Church Street Station New York, NY 10008-0770			ART UNIT	PAPER NUMBER
,			1792	
			MAIL DATE	DELIVERY MODE
			12/09/2008	PAPER

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/597,199	BUSE ET AL.				
Office Action Summary	Examiner	Art Unit				
	Felisa C. Hiteshew	1792				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 22 Oc	ctober 2008.					
	action is non-final.					
·=						
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>12-22</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>12-14 and 22</u> is/are rejected.						
7)⊠ Claim(s) <u>15-21</u> is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examine	r.					
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Goo the attached dotained Childe dettern for a list	or the continue copies flet receive	<b>u</b> .				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
Information Disclosure Statement(s) (PTO/SB/08)     Paper No(s)/Mail Date	5)  Notice of Informal P 6) Other:	ацепт Арріісатіоп				

Art Unit: 1792

#### **DETAILED ACTION**

### Response to Arguments

1. Applicant's arguments with respect to claims 12-22 have been considered but are most in view of the new ground(s) of rejection.

#### Claim Objections

Claim 22 is objected to because of the following informalities Appropriate correction is required.

As stated in MPEP 2113 [R-1] "[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted). Once a product appearing to be substantially identical is found and a 35 U.S.C. 102/103 rejection is made, the burden shifts to the applicant to show an unobvious difference "The Patent Office bears a lesser burden of proof in making out a case of prima facie obviousness for product-by-process claims because of their peculiar nature" than when a product is claimed in the conventional fashion. In re-Fessmann, 489 F.2d 742, 744, 180 USPQ 324, 326 (CCPA 1974). Once the examiner provides a rationale tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence

Application/Control Number: 10/597,199 Page 3

Art Unit: 1792

establishing an unobvious difference between the claimed product and the prior art product. In re Marosi, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed.

Cir.1983). Accordingly since the resulting product appears to be the same the instant claims are anticipated by and/or rendered obvious by the references.

## Claim Rejections - 35 USC § 112

2. Claim 22 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The examiner deems that the reference of Dhar encompasses the product of claim 22 which is extremely broad and vague. Correction is required. The examiner would suggest the cancellation of product claim 22.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
  - 1. Determining the scope and contents of the prior art.
  - 2. Ascertaining the differences between the prior art and the claims at issue.
  - 3. Resolving the level of ordinary skill in the pertinent art.
  - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Art Unit: 1792

- 5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 6. Claims 12-15, 18, 19 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dhar (Optical properties of reduced lithium niobate single crystals Journal of Applied Physics 68(1990) December, No. 11).

Dhar teaches a method for the optical transmission of LiNbO3 single crystals measured in the wavelength range of 200-900 nm, for different degrees of reduction...near the fundamental absorption edge. The samples were annealed at 1000\*C in oxygen which yielded colorless crystals. Samples with different degrees of reduction were obtained by heating these unreduced samples in vacuum of 10 Torr at different temperatures in the range of 600 to 1100\*C. (See entire reference).

The difference being that Dhar does not exactly teach wherein the lower valency state comprises 3+, placing the crystal between a plurality of electrodes

Application/Control Number: 10/597,199

Art Unit: 1792

connected to a voltage source between 1V and 1200V. Claims 18 and 19 differ from the Dhar reference is its apparatus limitations.

Apparatus limitations may have little weight in process claims. In re Tarcy-Honoch 158 USPQ 141, 150; Stalego v. Heymes 120 USPQ 473, 478 (CCPA); Ex Parte Hart 117 USPQ 193; In re Freeman 44 USPQ 116 (CCPA); In re Sweeney 72 USPQ 501 (CCPA).

It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeifer*, 1962 C.D. 408 (1961).

It would have been obvious to one of ordinary skill in the art to modify and optimize the process parameter limitation through routine experimentation in order to ensure proper orientation.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felisa Hiteshew whose telephone number is (571) 272-1463. The examiner can normally be reached on Mondays through Thursday from 5:30 AM to 4:00 PM with Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mikhail Kornakov, can be reached on (571) 272-1414. The

fax phone number for the organization where this application or proceeding is assigned is (571) 273-1463.

Information regarding the status of an application may be obtained from

Application/Control Number: 10/597,199 Page 6

Art Unit: 1792

the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system. see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866- 217-9197 (toll-free).

/Felisa C. Hiteshew/ Primary Examiner, Art Unit 1792